

## Refine Search

---

### Search Results -

Term	Documents
(1 AND 2).PGPB,USPT,USOC,EPAB,JPAB,DWPI,TDBD.	0
(L1 AND L2).PGPB,USPT,USOC,EPAB,JPAB,DWPI,TDBD.	0

---

**Database:**  
 US Pre-Grant Publication Full-Text Database  
 US Patents Full-Text Database  
 US OCR Full-Text Database  
 EPO Abstracts Database  
 JPO Abstracts Database  
 Derwent World Patents Index  
 IBM Technical Disclosure Bulletins

**Search:**

---

### Search History

---

**DATE:** Wednesday, November 17, 2004 [Printable Copy](#) [Create Case](#)

<u>Set Name</u> side by side	<u>Query</u>	<u>Hit Count</u>	<u>Set Name</u> result set
<i>DB=PGPB,USPT,USOC,EPAB,JPAB,DWPI,TDBD; PLUR=YES; OP=ADJ</i>			
L3	l1 and l2	0	<u>L3</u>
L2	poly u sepharose	154	<u>L2</u>
L1	archaeal polymerase	20	<u>L1</u>

END OF SEARCH HISTORY

Connecting via Winsock to STN

Welcome to STN International! Enter x:x

LOGINID:SSSPTAU188MXM

PASSWORD:

TERMINAL (ENTER 1, 2, 3, OR ?):2

\* \* \* \* \* \* \* \* \* Welcome to STN International \* \* \* \* \* \* \* \* \*

NEWS 1 Web Page URLs for STN Seminar Schedule - N. America  
NEWS 2 "Ask CAS" for self-help around the clock  
NEWS 3 JUL 12 BEILSTEIN enhanced with new display and select options,  
resulting in a closer connection to BABS  
NEWS 4 AUG 02 IFIPAT/IFIUDB/IFICDB reloaded with new search and display  
fields  
NEWS 5 AUG 02 CAplus and CA patent records enhanced with European and Japan  
Patent Office Classifications  
NEWS 6 AUG 02 The Analysis Edition of STN Express with Discover!  
(Version 7.01 for Windows) now available  
NEWS 7 AUG 27 BIOCOMMERCE: Changes and enhancements to content coverage  
NEWS 8 AUG 27 BIOTECHABS/BIOTECHDS: Two new display fields added for legal  
status data from INPADOC  
NEWS 9 SEP 01 INPADOC: New family current-awareness alert (SDI) available  
NEWS 10 SEP 01 New pricing for the Save Answers for SciFinder Wizard within  
STN Express with Discover!  
NEWS 11 SEP 01 New display format, HITSTR, available in WPIDS/WPINDEX/WPIX  
NEWS 12 SEP 27 STANDARDS will no longer be available on STN  
NEWS 13 SEP 27 SWETSCAN will no longer be available on STN  
NEWS 14 OCT 28 KOREAPAT now available on STN  
  
NEWS EXPRESS OCTOBER 29 CURRENT WINDOWS VERSION IS V7.01A, CURRENT  
MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP),  
AND CURRENT DISCOVER FILE IS DATED 11 AUGUST 2004  
NEWS HOURS STN Operating Hours Plus Help Desk Availability  
NEWS INTER General Internet Information  
NEWS LOGIN Welcome Banner and News Items  
NEWS PHONE Direct Dial and Telecommunication Network Access to STN  
NEWS WWW CAS World Wide Web Site (general information)

Enter NEWS followed by the item number or name to see news on that  
specific topic.

All use of STN is subject to the provisions of the STN Customer  
agreement. Please note that this agreement limits use to scientific  
research. Use for software development or design or implementation  
of commercial gateways or other similar uses is prohibited and may  
result in loss of user privileges and other penalties.

\* \* \* \* \* \* \* \* \* STN Columbus \* \* \* \* \* \* \* \* \* \* \*

FILE 'HOME' ENTERED AT 16:53:42 ON 17 NOV 2004

=> file ca, biosis, medline

COST IN U.S. DOLLARS

FULL ESTIMATED COST

SINCE FILE ENTRY	TOTAL SESSION
0.21	0.21

FILE 'CA' ENTERED AT 16:53:55 ON 17 NOV 2004  
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.  
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.  
COPYRIGHT (C) 2004 AMERICAN CHEMICAL SOCIETY (ACS)

FILE 'BIOSIS' ENTERED AT 16:53:55 ON 17 NOV 2004  
Copyright (c) 2004 The Thomson Corporation.

FILE 'MEDLINE' ENTERED AT 16:53:55 ON 17 NOV 2004

=> s poly u sepharose?  
L1 694 POLY U SEPHAROSE?

=> s archaeal polymerase  
L2 4 ARCHAEL POLYMERASE

=> d 12 1-4

L2 ANSWER 1 OF 4 CA COPYRIGHT 2004 ACS on STN  
AN 134:142663 CA  
TI The orientation of DNA in an archaeal transcription initiation complex  
AU Bartlett, Michael S.; Thomm, Michael; Geiduschek, E. Peter  
CS Department of Biology and Center for Molecular Genetics, University of  
California, La Jolla, CA, 92093-0634, USA  
SO Nature Structural Biology (2000), 7(9), 782-785  
CODEN: NSBIEW; ISSN: 1072-8368  
PB Nature America Inc.  
DT Journal  
LA English

RE.CNT 33 THERE ARE 33 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L2 ANSWER 2 OF 4 BIOSIS COPYRIGHT (c) 2004 The Thomson Corporation. on STN  
AN 2003:81516 BIOSIS  
DN PREV200300081516  
TI Structural basis for uracil recognition by archaeal family B DNA  
polymerases.  
AU Fogg, Mark J.; Pearl, Laurence H.; Connolly, Bernard A. [Reprint Author]  
CS School of Cell and Molecular Biosciences, University of Newcastle,  
Newcastle upon Tyne, NE2 4HH, UK  
b.a.connolly@ncl.ac.uk  
SO Nature Structural Biology, (December 2002) Vol. 9, No. 12, pp. 922-927.  
print.  
ISSN: 1072-8368 (ISSN print).  
DT Article  
LA English  
ED Entered STN: 6 Feb 2003  
Last Updated on STN: 6 Feb 2003

L2 ANSWER 3 OF 4 BIOSIS COPYRIGHT (c) 2004 The Thomson Corporation. on STN  
AN 2000:490391 BIOSIS  
DN PREV200000490512  
TI The orientation of DNA in an archaeal transcription initiation complex.  
AU Bartlett, Michael S. [Reprint author]; Thomm, Michael; Geiduschek, E.  
Peter  
CS Department of Biology and Center for Molecular Genetics, University of  
California, San Diego, La Jolla, CA, 92093-0634, USA  
SO Nature Structural Biology, (September, 2000) Vol. 7, No. 9, pp. 782-785.  
print.  
ISSN: 1072-8368.  
DT Article  
LA English  
ED Entered STN: 15 Nov 2000  
Last Updated on STN: 10 Jan 2002

L2 ANSWER 4 OF 4 MEDLINE on STN  
AN 2000455673 MEDLINE  
DN PubMed ID: 10966650  
TI The orientation of DNA in an archaeal transcription initiation complex.  
CM Comment in: Nat Struct Biol. 2000 Sep;7(9):703-5. PubMed ID: 10966630  
AU Bartlett M S; Thomm M; Geiduschek E P  
CS Department of Biology and Center for Molecular Genetics, University of California, San Diego, La Jolla, California 92093-0634, USA.. bartlett@biomail.ucsd.edu  
SO Nature structural biology, (2000 Sep) 7 (9) 782-5.  
Journal code: 9421566. ISSN: 1072-8368.  
CY United States  
DT Journal; Article; (JOURNAL ARTICLE)  
LA English  
FS Priority Journals; Space Life Sciences  
EM 200009  
ED Entered STN: 20001005  
Last Updated on STN: 20001005  
Entered Medline: 20000928

=> d 12 1-4 ab,bib

L2 ANSWER 1 OF 4 CA COPYRIGHT 2004 ACS on STN  
AB RNA polymerase from the hyperthermophile archaeon Pyrococcus furiosus (Pfu) forms specific and transcriptionally active complexes with its conjugate transcription factors TBP (the archaeal TATA binding protein homolog) and TFB (the archaeal homolog of eukaryotic RNA polymerase II and III transcription factors TFIIB and Brf) at the Pfu glutamate dehydrogenase promoter. A photochem. crosslinking method was used to map vicinity of the catalytic subunits of Pfu RNA polymerase to DNA locations distributed along the polymerase-promoter interface. The largest component of this **archaeal polymerase** is split into two subunits, A' and A'', whose relatively sharp boundary of DNA crosslinking (probed on the transcribed strand) is centered five to six base pairs downstream of the transcriptional start site. A strong argument based on this information, on the well-defined homol. between the core bacterial, archaeal and eukaryotic RNA polymerase subunits, and on the recently determined structure of a bacterial RNA polymerase specifies the directionality of DNA in the archaeal transcription complex and its trajectory downstream of the transcriptional start site.

AN 134:142663 CA  
TI The orientation of DNA in an archaeal transcription initiation complex  
AU Bartlett, Michael S.; Thomm, Michael; Geiduschek, E. Peter  
CS Department of Biology and Center for Molecular Genetics, University of California, La Jolla, CA, 92093-0634, USA  
SO Nature Structural Biology (2000), 7(9), 782-785  
CODEN: NSBIEW; ISSN: 1072-8368  
PB Nature America Inc.  
DT Journal  
LA English

RE.CNT 33 THERE ARE 33 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L2 ANSWER 2 OF 4 BIOSIS COPYRIGHT (c) 2004 The Thomson Corporation. on STN  
AB Deamination of cytosine to uracil in a G-C base pair is a major mutagenic event, generating G-C>U-T mutations if not repaired before DNA replication. Archaeal family B DNA polymerases are uniquely able to recognize unrepaired uracil in a template strand and stall polymerization upstream of the lesion, thereby preventing the irreversible fixation of an A-T mutation. We have now identified a 'pocket' in the N-terminal domains of archaeal DNA polymerases that is positioned to interact with the template strand and provide this ability. The structure

of this pocket provides interacting groups that discriminate uracil from the four normal DNA bases (including thymine). These groups are conserved in **archaeal polymerase** but absent from homologous viral polymerases that are unable to recognize uracil. Using site-directed mutagenesis, we have confirmed the biological role of this pocket and have engineered specific mutations in the Pfu polymerase that confer the ability to read through template-strand uracils and carry out PCR with DUTP in place of dTTP.

AN 2003:81516 BIOSIS  
DN PREV200300081516  
TI Structural basis for uracil recognition by archaeal family B DNA polymerases.  
AU Fogg, Mark J.; Pearl, Laurence H.; Connolly, Bernard A. [Reprint Author]  
CS School of Cell and Molecular Biosciences, University of Newcastle,  
Newcastle upon Tyne, NE2 4HH, UK  
b.a.connolly@ncl.ac.uk  
SO Nature Structural Biology, (December 2002) Vol. 9, No. 12, pp. 922-927.  
print.  
ISSN: 1072-8368 (ISSN print).  
DT Article  
LA English  
ED Entered STN: 6 Feb 2003  
Last Updated on STN: 6 Feb 2003  
  
L2 ANSWER 3 OF 4 BIOSIS COPYRIGHT (c) 2004 The Thomson Corporation. on STN  
AB RNA polymerase from the hyperthermophile archaeon Pyrococcus furiosus (Pfu) forms specific and transcriptionally active complexes with its conjugate transcription factors TBP (the archaeal TATA binding protein homolog) and TFB (the archaeal homolog of eukaryotic RNA polymerase II and III transcription factors TFIIB and Brf) at the Pfu glutamate dehydrogenase promoter. A photochemical crosslinking method was used to map the vicinity of the catalytic subunits of Pfu RNA polymerase to DNA locations distributed along the polymerase-promoter interface. The largest component of this **archaeal polymerase** is split into two subunits, A' and A'', whose relatively sharp boundary of DNA crosslinking (probed on the transcribed strand) is centered five to six base pairs downstream of the transcriptional start site. A strong argument based on this information, on the well-defined homology between the core bacterial, archaeal and eukaryotic RNA polymerase subunits, and on the recently determined structure of a bacterial RNA polymerase specifies the directionality of DNA in the archaeal transcription complex and its trajectory downstream of the transcriptional start site.  
AN 2000:490391 BIOSIS  
DN PREV200000490512  
TI The orientation of DNA in an archaeal transcription initiation complex.  
AU Bartlett, Michael S. [Reprint author]; Thomm, Michael; Geiduschek, E. Peter  
CS Department of Biology and Center for Molecular Genetics, University of California, San Diego, La Jolla, CA, 92093-0634, USA  
SO Nature Structural Biology, (September, 2000) Vol. 7, No. 9, pp. 782-785.  
print.  
ISSN: 1072-8368.  
DT Article  
LA English  
ED Entered STN: 15 Nov 2000  
Last Updated on STN: 10 Jan 2002  
  
L2 ANSWER 4 OF 4 MEDLINE on STN  
AB RNA polymerase from the hyperthermophile archaeon Pyrococcus furiosus (Pfu) forms specific and transcriptionally active complexes with its conjugate transcription factors TBP (the archaeal TATA binding protein homolog) and TFB (the archaeal homolog of eukaryotic RNA polymerase II and III transcription factors TFIIB and Brf) at the Pfu glutamate dehydrogenase promoter. A photochemical crosslinking method was used to

map the vicinity of the catalytic subunits of Pfu RNA polymerase to DNA locations distributed along the polymerase-promoter interface. The largest component of this **archaeal polymerase** is split into two subunits, A' and A'', whose relatively sharp boundary of DNA crosslinking (probed on the transcribed strand) is centered five to six base pairs downstream of the transcriptional start site. A strong argument based on this information, on the well-defined homology between the core bacterial, archaeal and eukaryotic RNA polymerase subunits, and on the recently determined structure of a bacterial RNA polymerase specifies the directionality of DNA in the archaeal transcription complex and its trajectory downstream of the transcriptional start site.

AN 2000455673 MEDLINE  
DN PubMed ID: 10966650  
TI The orientation of DNA in an archaeal transcription initiation complex.  
CM Comment in: Nat Struct Biol. 2000 Sep;7(9):703-5. PubMed ID: 10966630  
AU Bartlett M S; Thomm M; Geiduschek E P  
CS Department of Biology and Center for Molecular Genetics, University of California, San Diego, La Jolla, California 92093-0634, USA.. bartlett@biomail.ucsd.edu  
SO Nature structural biology, (2000 Sep) 7 (9) 782-5.  
Journal code: 9421566. ISSN: 1072-8368.  
CY United States  
DT Journal; Article; (JOURNAL ARTICLE)  
LA English  
FS Priority Journals; Space Life Sciences  
EM 200009  
ED Entered STN: 20001005  
Last Updated on STN: 20001005  
Entered Medline: 20000928

=> d his

(FILE 'HOME' ENTERED AT 16:53:42 ON 17 NOV 2004)

FILE 'CA, BIOSIS, MEDLINE' ENTERED AT 16:53:55 ON 17 NOV 2004  
L1 694 S POLY U SEPHAROSE?  
L2 4 S ARCHAEL POLYMERASE

=> s l1 and l2  
L3 0 L1 AND L2